

1. Write down the like terms.

a) $2ab, 7, a, ab, -3ab, -2b, -ab$ b) $4t^2, -4t^3, 4, 4t^3, 2t^4, \frac{2}{3}t, -7t^3$

c) $x^2y^2, xy, -5x^2y^2, -5x, 9x^2y, xy^2$

2. Simplify by combining like terms.

a) $x + x + x + y$ b) $u - t + u - t + u$ c) $3x - 2x + x + 5$

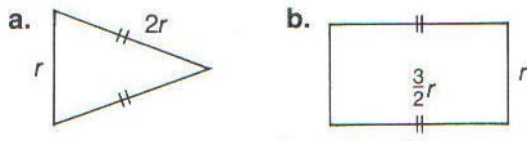
d) $-4k + 9 + 3k - 2 + k - 2k$ e) $2d + 6e - 3e - d + 2e + 6d$

f) $5r - r^2 + 3r - r^2 + 5t - 6r$ g) $2xy - 5xyz + 3 - 2 + xyz$

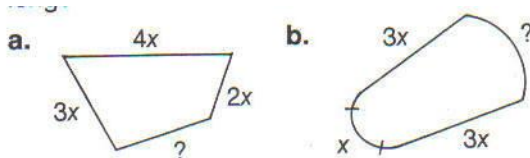
3. Simplify the expression. Evaluate if $a = 4$ and $b = -3$.

a) $3a + 5 - a$ b) $a + 2b - 4b + 3a$ c) $19 - a + b^2 + 4a$ d) $a^2 + ab + 5ab + 2a^2 + 3$

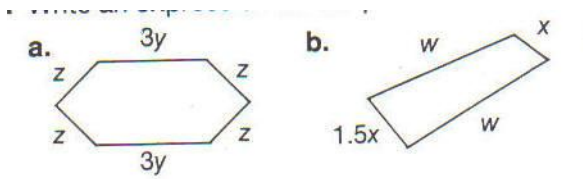
4. Write an expression for the perimeter. What is the perimeter if $r = 8$ cm.



5. The perimeter of the figure is $12x$. What is the length of the fourth side?



6. Write an expression for the perimeter.



7. The cost in dollars of manufacturing the machine parties calculated using the formula $c = -0.05n^2 + 60n + 30 - 10n$, where n is the number of parts made.

Find the cost of manufacturing 200 of these parts.